

INOBACTER™

BACTERIA



Oenological lactic acid bacteria with re-activation and acclimatisation phases (starter). For very low pH musts and wines.

↓ OENOLOGICAL APPLICATIONS

In the most acidic wines (pH < 3.2), malolactic fermentation is difficult to initiate spontaneously. Moreover, these random spontaneous triggers can have harmful sensory consequences on the finesse and elegance of the wines. **INOBACTER™** is a known and recognised asset to avoid these dangers and to trigger malolactic fermentation in a safe and malolactic fermentation in these wines.

INOBACTER™ is used following a three stage protocol (reactivation, starter, seeding the vat) which enables bacteria to adapt to the lowest pHs.

As the winemaker chooses, the bacteria can be added to the must, during alcoholic fermentation or at the end of it.

The very great tolerance of this strain under extreme conditions guarantees total effectiveness for breaking down malic acid.

↓ CHARACTERISTICS

- Preparation controlled by the microbiology laboratory of the « Direction Qualité et Développement Durable » of the CIVC.
- Species: *Oenococcus oeni*.
- Revivifiable population > 1.10⁹ CFUs/g of powder.
- Particularly tolerant of low pHs (from 2.9)
- Alcohol tolerance: up to 14% vol.
- SO₂ tolerance: up to 50 mg/L total SO₂.
- Optimal temperature ranges: between 18 and 22°C.
- In case of a combination of difficult conditions, these tolerance ranges (pH, alcohol, SO₂, temperature) are more limited.
- Diacetyl production: very low.
- Volatile acidity production: low.
- No production of biogenic amines.
- Phenol-negative bacteria: do not produce volatile phenols or their precursors.

The **INOBACTER™** strain does not originate from, and does not come into contact during any of the production processes, with genetically modified organisms.

↓ DOSE RATE

- 0.72 g of bacteria/hL of wine or 4 g/L of reactivation medium.

↓ PACKAGING AND STORAGE

INOBACTER™ is a kit containing a sachet of oenological bacteria and a sachet of special activator.

- Kits for seeding 25 hL, 100 hL, 500 hL, 1,000 hL and 2,000 hL of must or wine.

INOBACTER™ must be kept cold. The powder retains its characteristics for at least 36 months (which is its shelf life) from the date of production if kept at -18°C and at least 18 months when stored at +4°C. The packaging in aluminium sachets keeps the bacteria out of contact with oxygen and moisture.

Sealed packets can be delivered and stored for three weeks at room temperature (< 25°C) without significant loss of activity and efficacy. However, an opened sachet should be used immediately as the freeze-dried powder is hygroscopic and the bacteria lose their activity very quickly.

INOBACTER™

INSTRUCTIONS FOR USE

1- Initiate alcoholic fermentation of the yeast starter ● PC

- Must settled from the first day of harvest, little sulphite addition, not chaptalised: (pH = 3,2 - 3,3, SO₂ total < 40 mg/L,
- Volume: at least 3% of the volume of the vats to be inoculated.
- Add 25 g/hL Active dry yeasts (ADY) activated beforehand and 50g/hL **ACTIVIT™**
- Keep fermentation temperature: 20 to 25°C.

2- Reactivate the bacteria

Prepare the reactivation medium ● MR :

- Dilute the appropriate volume (see table below) of **must** (from the second press) wine (total SO₂ < 40 mg/L) in the same volume of unchlorinated water at 25°C.
- Add the activator from the kit and mix well. Maintain the temperature between 23 and 25°C.

Rehydrate the bacteria:

- A) Take the appropriate volume of pre-made ● MR (see table below) table below),
- B) add the dose of **INOBACTER™**. If the rehydration is carried out in must, add 25 g/hL of LSA.
- C) Add this mixture
- Maintain at 23-25°C.

INOBACTER™ kit	Total reactivation volume (must or wine + water)	Volume to be taken for rehydration
25 hL	2,5L + 2,5L water	1L
100 hL	10L + 10L water	2L
500 hL	50L + 50L water	5L
1000 hL	100L + 100L water	10L
2000 hL	200L + 200L water	20L

3- Yeast starter ● PC

- When the reactivation medium ● MR is ready (when malic acid < 1g/L), introduce it into the yeast starter, even if alcoholic fermentation has not completed.
- Maintain the temperature at 20°C.

4- Tank inoculation

- When 2/3 of the malic acid has been consumed, incorporate the vat foot into the total volume of wine or **must in fermentation**.
- In case of difficult conditions, detoxify the wine with **CELLCLEAN™** or **BIO YEAST CELL WALLS™** (20 g/hL) is recommended.
- In very low pH conditions (< 3.05 - 3.1), the prior use of **NUTRIFLORE FML™** (20 g/hL) in the wine can improve the resistance of the bacteria and the resistance and MLF induction rate.
- Maintain at 18-20°C. Never leave a tank to drain.
- Carry out a control after 3 weeks at the top and bottom of the tank.

